YOLO AUDUBON SOCIETY
AVIAN INFLUENZA SYMPOSIUM
APRIL 15, 2006
DAVIS SENIOR CENTER, DAVIS, CALIF.

The Yolo Audubon Society's Avian Influenza Symposium was attended by approximately 200 people, representing birders, hunters, public agencies, educational institutions, the poultry and biomedical industries, conservation organizations, and community interest groups; geographically, they ranged from Fort Bragg in the north to Los Angeles in the south.

OPENING REMARKS

- **Michael Lawler,** Ph.D, president, Yolo Audubon Society
- **Sid England,** Ph.D., Avian Influenza Symposium Program Chair, Yolo Audubon Society

After welcoming the attendees and thanking the sponsors, organizers and presenters, Mike Lawler began by noting that avian influenza (AI) has the potential to be globally significant. The goal of today's symposium, he said, is to bring current and factual information to the attendees, drawing a distinction between concerns about the disease and the truth. He then introduced Sid England.

England explained that the genesis of this symposium was a conversation he had with another ecologist who had some different understandings about AI. "I thought, if we have differing views, there must be others who aren't clear about it, either," he said. "I wanted to take advantage of the resources we have available" to educate and inform the people who have a strong interest in learning more. England then introduced the day's keynote speaker, Virginia Hinshaw, Ph.D., a virologist, influenza expert, and provost and executive vice chancellor, UC Davis.

KEYNOTE SPEAKER

Virginia Hinshaw, Ph.D.: The natural history of influenza.

AI is caused by influenza A viruses. The current problem with the AI H5N1 virus is occurring primarily in bird populations, both domestic and wild. The H5N1 subtype refers to the hemagglutinin (H), the viral attachment protein, and the neuraminidase (N), the viral exit protein - both are on the surface of the virus and antibodies to these are important in protection against infection and replication of the virus. Hinshaw described how the virus changes (antigenic drift and shift) and moves from one host to another. Ducks, at the center of the "Wheel of Influenza Misfortune," are a natural reservoir host for influenza viruses, including all known 16 H and 9 N subtypes, and its effects in them are usually mild. When the virus migrates into chickens, it unfortunately more often develops into a "hot," or virulent, strain, but these are rare. Pigs are the "mixmasters" of the flu world, Hinshaw said; viruses can be transmitted in both directions between pigs and humans and avian viruses infect pigs as well - this allows influenza viruses to "swap" genes with other influenza viruses.

Does AI equal a pandemic? An influenza pandemic is a global outbreak of disease that occurs when a new influenza virus appears or "emerges" in the human population, causes serious illness, and spreads easily from person to person worldwide. Previous influenza viruses that became pandemics occurred in 1918-19, H1N1 (Spanish flu); 1957-58, H2N2 (Asian flu); and 1968-69, H3N2 (Hong Kong flu).

What are the differences between seasonal influenza and a pandemic? Seasonal flu affects from 5 percent to 20 percent of the U.S. population. Approximately 200,000 people are hospitalized, and 36,000 people die. Those at highest risk include older people, young children, and people with certain health conditions. The predicted impacts of a moderate pandemic include 15 percent to 35 percent of the population becoming ill, with 734,000 hospitalized and 207,000 deaths; those at highest risk will depend upon the virus.

An outbreak of highly virulent AI virus causes economic devastation and food loss for the affected populations. Since 2003, H5N1 infections in poultry or wild birds have been found in East Asia and the Pacific, the Near East, Africa, South Asia, and Europe and Eurasia. Controlling H5N1 in birds typically means terminating all infected and exposed birds, possibly all birds in the region.

Controlling the spread of H5N1: The AI virus can spread and circulate anywhere live birds congregate. Major risks are posed by live bird markets, cockfights, smuggling, and migratory birds. Other hosts that have been infected with the avian H5N1 virus include multiple avian species and mammals, including tigers (which were fed raw, infected chickens), cats, pigs, and weasels. Heat destroys the virus, so cooked meat is safe.

Of the 193 confirmed human cases of H5N1 since 2003, there have been 109 deaths. Although influenza vaccines exist, none are yet available for H5N1. Of the antivirals available, two work on the H, two work on the N; the H5N1 virus is resistant to the antivirals against the H.

What are some steps that can be used to control its spread in humans, both before a pandemic occurs, and then during such an event?

Pre-pandemic actions: Global surveillance and assistance ("We are only as healthy as our neighbors," Hinshaw said, "and viruses don't apply for visas"); stockpiling of vaccines and antivirals; and further research on new vaccines.

During-pandemic actions: Quarantine of infected people; "ring" vaccination of those who have been exposed, or potentially exposed, to an infected person (e.g., family, co-workers, close friends. and those individuals' contacts); and antiviral treatment of infected and exposed individuals.

In summary, Hinshaw said, the three critical elements for controlling the spread of AI are global cooperation, planning, particularly for "social distancing" (the necessity to isolate or quarantine people), and remaining calm. "Information is power," she said. "And so is knowing how to respond." The bottom line: "Flu is not going away, and the probability of a pandemic due to this H5N1 virus increases the more the virus spreads." In response to a question, Hinshaw said that viruses now seem to jump species more often because there are more people in the world, there is rapid movement of people around the world, including entering new ecological niches that expose people to viruses in other species.

PANEL ON AVIAN INFLUENZA IN BIRD POPULATIONS

- **John Takekawa**, Ph.D., U.S. Geological Survey research wildlife biologist
- **Walter Boyce**, DVM, Ph.D., professor, UC Davis School of Veterinary Medicine and executive director, Wildlife Health Center;
- **Carol Cardona**, DVM, Ph.D., Poultry Extension veterinarian and associate professor, UC Davis
- **Bob McLandress**, Ph.D., president, California Waterfowl Association

John Takekawa: Ecology of Wild Bird Populations in the Pacific Flyway.

All 16 combinations of H and nine of N are present in wild waterfowl and have been for a long time. Wild birds have “low pathogenic” AI; when transmitted to poultry, that “low path” virus can mutate, becoming a “high pathogenic” virus, which, when it reinfects wild birds and kills them.

Migratory birds are among the ways AI can travel into North America. California and the Pacific Coast are suspected as a likely site for the possible arrival of AI in the U.S. The consensus is that wild birds do carry H5N1 in its “high path” form and can introduce it to domestic poultry that lie along their migratory routes.

Strategies to control and contain outbreaks of the virus among migratory birds include developing risk maps of bird movement and distribution to predict areas in which to focus response to virulence and looking at wetland habitats, poultry areas, and human population centers to identify AI risk areas. If H5N1 is carried to North America through Alaska, it is likely to move south from there beginning in August; sampling of hunter-harvested birds can aid in detecting movement of the virus, but bird mortality may be the best

evidence of spread. "Better information about wild birds and their movements may be key to controlling this disease threat," Takekawa said.

Walter Boyce: What can we expect, and what can we do, when H5N1 is in California's wild birds?

"Our early warning has occurred," Boyce said, "and the first entry will probably happen this year." H5N1 is expected to spread among birds; if 2 percent to 20 percent of ducks and geese are infected, that equates to 120,000 to 1,200,000 birds in the Central Valley, "the beginning," Boyce said, "of a *bird* pandemic, not a human pandemic."

Wild birds have the flu virus in their GI tracts and therefore in their feces. Sick or dead birds have the virus throughout the body; other birds are infected by orally ingesting fecal material or by eating infected birds. "We do not expect the virus to easily spread from wild birds to people," Boyce said. "The risk of human infection is low, but not zero."

When the virus arrives, where will it be, and how can we reduce our risk of exposure? Urban and suburban ponds where waterfowl congregate can pose potential exposure risks to people and to pets. Avoiding such areas poses fewest risks. If we choose to visit them and get fecal matter on our shoes, one option is to wash them (soap and water kills the virus) or to put the shoes in a plastic bag and leave it in the sun. Remember: Heat kills the virus.

Birds in backyards and at feeders pose a very slight risk from their droppings; remember, there is a low risk of virus transmission from wild birds to humans. When eating outdoors, cover the food to keep birds away, and keep bird feeders clean. Wash your hands using soap and warm water. Keep cats inside so they won't eat birds.

If you find a dead bird, you can call the West Nile Virus dead bird hotline, but it may not get picked up. The safest action is to not touch or handle a dead bird, but leaving it increases the risk of the virus's spread. To remove it, wear gloves, and use a plastic bag to dispose of the bird in the trash.

Above all, Boyce said, stay informed. Listen to the news; pay attention to the latest information.

Carol Cardona: Avian influenza in domestic poultry.

Cardona posed this question, "If wild birds have AI, then what's the big deal about it being in chickens?" The big deal is that chickens are important intermediate hosts; the virus is amplified in them, and chickens have more contact with humans than wild birds do. And H5N1 is devastating for poultry.

Not all flu is the same. AI viruses are a big, diverse group; some are not so bad, some are really bad. Are California birds at risk of infection? Commercial poultry flocks are protected by biosecurity–fences, protective clothing and shoes for workers, buildings that keep wild birds away–which makes infection unlikely. If a bird does become infected, it doesn't get into the food chain, and even if by some chance it does, cooking kills the virus. So, if AI comes to the U.S., it is not likely to affect food safety.

What impact could AI have on California? Roughly 25,000 people are employed by poultry companies in the state, and $2.5 billion in sales is generated by California poultry, so the impact could be significant; "fear psychosis" reduced Italians' consumption of poultry by 70 percent.

Are poultry other than commercial birds at risk? There are 5 million noncommercial poultry in California, and AI kill nearly 100 percent of the poultry it infects. Backyard flocks are not necessarily at risk if rules are followed: Wear dedicated clothing to work with the flock; keep food and water away from wild birds, and cover the poultry, too, if possible; limit visitors and weigh the benefits and risks of each visit. Check flock health daily, noting egg production, condition of feathers and eyes, and whether there is a nasal discharge. Sick or dead poultry may be taken to the California Animal Health and Food Safety Laboratory, which offers free necropsy service. Labs are located in Davis, Turlock, Fresno, and San Bernardino; the telephone number for the Davis lab is (530) 752-8700. More information is available on the following Web sites:

- www.usda.gov/wps/portal/usdaome?navtype=SU&navid=AVIAN_INFLUENZA

- www.cdfa.ca.gov/ahfss/ah/Avian_Influenza
- www.fao.org/againfo/subjects/en/health/diseases-cards/special_avian.

Bob McLandress: Wetland management to fight avian flu.

Avian viruses have scary acronyms, McLandress said, but they are difficult for humans to contract; they typically spread themselves to new hosts through "poop, spit, or boogers" (feces, or respiratory tract discharges). If these avian viruses mutate to or combine with "human" viruses, they can become a big problem.

Will the High Pathogenic H5N1 create a doomsday situation? If an H5N1 avian virus mutates to become a "human" virus, that can be passed from human to human; if it can be passed like the common cold; if it is highly pathogenic; if it is passed around the world; and if resistance in humans is low, then millions of people could die; these steps have not happened, yet. In reality: almost all cases of H5N1 reported in humans have been from direct infection from domestic chickens; the highly pathogenic H5N1 strain has not been recorded in North America; no one in North America has been diagnosed as ill (or dead) from H5N1. There are, however, H5N1 warnings: It is spreading and mutating among wild birds; deaths of wild birds in Eurasia are on the increase; and H5N1 may be introduced to North America from wild birds. H5N1 may spread to North America in 2006. We cannot stop the virus's entry, but: we may be able to contain the spread in wild birds; we can reduce the risk of the virus infecting chickens, and we must minimize the risk of loss of human life. The opportunity is to reduce the rate of spread of H5N1 throughout North America and to lower the risk of infecting birds that are closest to millions of people (chickens, pets, park and zoo birds, and those on golf courses).

Chicken poop (feces) and byproducts of commercial chicken operations have probably been the most important vectors for spreading H5N1 in Asia and Europe. Wild birds (mostly waterbirds) have become carriers, their vulnerability to becoming infected or dieing varies by species; and there are suggestions of decreasing death rates in the wild. Successful actions in containing the virus have resulted from rapid detection and elimination of infected poultry: "Detection provides the best opportunity for reducing spread," McLandress said. Contagious avian disease outbreaks have declined in California over the past 30 years; e.g., avian cholera and botulism. ("These are very different diseases," McLandress said, "but they are highly contagious, and we can learn from them.")

Avian diseases can be bacterial, viral, fungal, and parasitic; some can, but rarely do, infect humans. Some (like botulism, avian cholera, and Newcastle's disease) cause massive die-offs in birds. Most outbreaks of these diseases follow a pattern, impacting species where they are highly concentrated and following episodes of "stress" (such as a cold spell); they often occur where water circulation is poor.

McLandress made several recommendations for managing wetlands: continue the current trend of wetland restoration and enhancement since more wetlands results in more food, better dispersal, and consequently healthier bird populations; wetland enhancement improves water circulation. Potential "hot spots" for transmission need to be identified and monitored. Sixty percent of wetlands are privately owned and managed by duck hunters.

Early detection of the virus allows focused, cost-effective containment. Duck hunters and bird watchers, two groups on the "front lines", should be recruited to help with detection; they are sensitive to the time of arrival and the distribution of Asian birds in North America. Existing, targeted efforts, such as bird banding operations, picking up dead birds from disease outbreaks, and sampling of hunter-killed birds, can also be used for detecting presence of the virus.

Hunters and bird-watchers are integral to the effort to contain and control H5N1. Both groups are motivated to flood and manage wetlands, have detailed, on-the-ground knowledge about wetland conditions, and have a network for finding dead birds. In addition, hunters harvesting birds reduce mortality from other causes, especially disease; "If a hunter doesn't kill a bird in the fall, disease often will usually take care of over-population in spring," McLandress said. And, he added, both groups are pragmatists about life and death and can help the general public to understand and put the risks of avian flu in perspective.

McLandress drew a comparison between reacting and overreacting, noting that when, 52 years ago, his sister was stricken with polio, knowledge was scant and rumors abounded about how that disease was spread, causing many to overreact to false information. Today, because of medical science and advances in communication technology, we can react correctly. "Overreaction and fright do not help us," McLandress said. "They only serve to reduce our willingness to live life to the fullest."

Selected questions and responses:

Q: What security measures are practiced for organic, free-range poultry?

A: (Cardona): Organic, free-range poultry growers have always covered food and water; ideally, chickens also would be covered.

Q: What is the AI threat to individual hunters who are cleaning birds?

A: (McLandress and Boyce): Be aware that the processing environment is the opportunity for exposure: use gloves, disinfect, dispose of materials properly. Putting entrails in a slough increases risk to other species. A list of appropriate actions will be published in *California Waterfowl* magazine.

Q: What happens if there is a die-off in wetlands?

A: (Boyce): First response: Do nothing. Remember S.A.D.: Stop, Assess, Do nothing. Do nothing, spread nothing.

AVIAN INFLUENZA AND THE CALIFORNIA LEGISLATURE

Diane Colborn, chief consultant to California Assembly Water, Parks and Wildlife Committee: Legislative actions, the Avian Flu Wildlife Surveillance Act (AB 874).

Although the threat of AI to California's commercial poultry industry and to public health were previously recognized by the legislature and the governor's office, Gov. Schwarzenegger's January budget includes funds to address the issue: $22 million for public health and $7.2 million for California Dept. of Food and Agriculture, but no funds earmarked for wildlife surveillance, and the California Dept. of Fish and Game (CDFG) has no resources for surveillance, monitoring, testing, and sampling.

Recognizing that wild birds play a major part in the spread of AI and that many agencies should be involved, Assemblymember Lois Wolk introduced AB 874 to make legislative recognition of AI and to effect interagency- and cross-jurisdictional coordination. The proposed legislation brings the University of California into the picture and calls for developing rapid response protocols: who needs to respond and how to inform the public.

Since AB 874 was introduced, AI has spread rapidly in Asia and into Europe, and there has been a corresponding recognition of the role of wild birds in its spread. CDFG has requested $1 million to develop detection capability, and the Senate Joint Legislative Committee is taking a comprehensive look at testing and surveillance. AB 874 will be amended to include significant funding for CDFG. The focus will now be in budget hearings; the May revise may result in conference committees. (A handout from Colborn summarizing state legislation pertaining to AI is appended at the end of this document.)

PANEL ON AVIAN INFLUENZA AND PUBLIC HEALTH

- **Christian Sandrock**, MD, MPH, asst. professor of clinical medicine, Division of Pulmonary and Critical Care and Division of Infectious Diseases, UC Davis School of Medicine
- **Bette Hinton**, MD, MPH, Yolo County public health officer
- **Regina Phelps**, Certified Emergency Manager, RN, MPA, president, Emergency Management & Safety Solutions Inc., San Francisco

Christian Sandrock: Federal, state, and regional planning.

There are several differences, Sandrock said, between H5N1 and pandemic influenza. H5N1 is an AI that can infect humans. It has limited person-to-person spread and can cause severe disease. However, it is not a pandemic. For a virus to become a pandemic, four conditions must be met: A new influenza virus must appear, isolated from humans; there must be little or no immunity in the population; the virus must have demonstrated ability to replicate and cause serious disease; and there must be efficient person-to-person transmission. AI has fulfilled all but the last of these: So far, there is no efficient person-to-person transmission.

There are differences between H5N1 and seasonal flu. The latter causes disease every year owing to antigenic "drift," whereas pandemics cause major disease resulting from antigenic "shift." A "reassortment" of the virus can occur when it is transmitted among species (e.g., from ducks to pigs to humans and back again), leading to a new viral strain.

What are the chances of a major pandemic occurring? Experts disagree. Some say it's inevitable that the next "big one" will be triggered by H5N1; others say it may happen now or over the next several years. Bottom line: No one really knows. The current focus is on "high path" AI H5N1, but due to antigenic shift and reassortment, there is no way to know what the exact strain for the next pandemic will be, making vaccination and medication planning more difficult. Thus, general preparedness is more appropriate at present. A pandemic has yet to occur, Sandrock said, because there has not yet been a full reassortment of the virus.

A flu pandemic is not your typical health emergency, Sandrock said. It has a longer duration than other emergency events, occurring in waves of ill people over several months' time. Large segments of the population are affected, often the young and otherwise healthy, and there are significant economic and social consequences. Health-care workers and first responders often fall ill, and the work force is reduced. And there is a simultaneous and rapid spread of the disease worldwide.

Preparedness before H5N1 arrives consists of surveillance, education, and taking an all-hazards approach to preparing. Physicians monitor those who present with influenza, taking swab samples and sending them to the county Public Health office, where they are tested for cultures that act differently than expected. Educational spots on television and radio can inform the public about how to interact with others when illness is suspected or present and how to keep themselves healthy. And hospitals and public health offices can begin to plan for the advent of more sick people.

Once H5N1 has appeared in birds, surveillance, education, and preparedness continue but are ramped up, and targeted intervention (e.g., immunization of health-care workers and other first responders) begins. If and when AI appears in the human population, surveillance includes identifying and finding the contacts of those who have become ill, and education pays special attention to at-risk groups. Targeted intervention occurs with at-risk groups and health professionals, and preparedness focuses on having ready access to medicines, masks, and other necessary supplies.

If AI becomes a pandemic, surveillance continues, emphasizing contact tracing, and intervention includes vaccination, antivirals, and isolating the ill. Getting information to the public will be the focus of education, and limitations will be placed on social contacts.

The federal national preparedness strategy, a $7 billion proposal, calls for early detection and surveillance, developing vaccines, stockpiling antivirals, and formulating federal, state, county, and community emergency response plans. Sandrock gave some comparative figures for the number of antiviral treatments currently available in the U.S. (2.3 million) versus the number estimated to be needed to be prepared for a pandemic (133 million), and for the dollar amounts requested by President Bush to increase the stockpile ($1 billion) versus the cost of one course of AI antiviral ($132).

In conclusion, Sandrock said the best preparedness includes preparing for all hazards, focusing on your local community and your family. And, he said, plan for at least one week without help: "Remember Katrina." Also, he recommended using alcohol-based hand disinfectants.

Bette Hinton: Local planning.

Local agencies bear much responsibility in preparing for all health emergencies, including AI, Hinton said. The county health department is the information point for any health incident, including during the regular flu season; it is the conduit between the community and health practitioners.

"Plenty of people become ill or die in the regular flu season," Hinton said. The county public health office provides vaccine coordination and gets as many people vaccinated as possible with the current vaccine. Hinton urged that people get a seasonal flu vaccination every year. "Don't become a mixing vessel."

In a regular flu season accompanied by a threat of a pandemic and with AI present in birds but not people, the county public health office would increase its surveillance of ill people and plan with hospitals to ensure adequate supplies, train trainers for educating others, and hold emergency response drills at least once a month, along with training staff and recruiting volunteers. In a pandemic, the office initially would ratchet up surveillance to find every ill person, but would soon be unable to do that and would instead work to manage the pandemic by making use of all the preparations listed above. If there is no treatment available, patients would be isolated in hospital and families quarantined at home.

What should you do? Hinton advised storing food and other supplies at home. Protect your own health: Wash your hands frequently, and don't go near anyone who is sick. Stay in touch with sources of information, checking the Web sites of the Red Cross and your local health department. Hunters and birders should get the flu vaccine every year and learn how to stay clean by using gloves and protective clothing. "Stay informed," Hinton said.

Regina Phelps: Private sector planning.

Managers need to plan for the effects of a pandemic on their business and should make certain assumptions, which include 30 percent absenteeism, an 18-month time span, many functions not carried out, civil society taxed but functional, fewer than six weeks of warning before the virus arrives in the U.S., and no remedies immediately available. Senior management should create a pandemic task force and must endorse all plans. The task force should address the following challenges:

Human resources: What functions are mission-critical? Who *has* to come to work, who *needs* to come to work, who *can* work at home, and who has *no need* to work? Those in the first group must work in a "social distancing" environment, separated either physically or via alternating shifts, and hand-washing should be paramount. Work areas should be cleaned frequently; eliminate all face-to-face meetings. In the second group, a robust work-from-home program should be in place, including providing broadband access and company equipment. For those in the other two categories, how long to pay and provide benefits to those who aren't working are issues to be faced. Other employees whose needs should be addressed are those who either refuse to come to work out of fear of becoming ill or cannot because they must stay home to care for ill family members.

Other issues to be considered are travel (restrict it? when? what happens when an employee is quarantined in another country?); communicating with employees (how often? to whom? by whom? and what's the message?); ensuring all employee information is current; providing home e-mail and home cell phone service; and learning strategies to deal with overloaded telephone systems (e.g., text messaging, VoIP and instant messaging). Security requirements may mandate that only certain people are allowed into buildings, along with screening visitors and vendors. How will janitorial services be handled? How often should the HVAC filters be changed?

There may be interruptions of the supply chain, and Phelps advised conducting a supply-chain analysis: Where does the stuff you need come from? Since there is no insurance available to cover losses from a pandemic, prepare models showing decreases in income from 10 percent to 30 percent lasting from 90 to 120 days. And there needs to be planning for incident and crisis management, along with succession planning; what happens if the top people are no longer there?

One source of information is a listserv, promedmail.org, from the International Society for Infectious Diseases, which can be subscribed to via their Web site, www.isid.org. "*Do* something," Phelps said.

Selected questions and responses:

Q: Which flu vaccine should I take?

A: Whatever is available this year. Everyone should have it if a supply is available.

Q: In an emergency, we may need to take care of ourselves. Is training available?

A: Learn CPR and first aid and how to care in-home for a flu patient. Be self-contained; have a two-week supply of food, water, etc., and a supply of your regular medications.

Q: Do you have confidence that the health-care system in developed countries such as the U.S. can reduce the death rate from AI?

A (Hinton): I have some confidence, but we don't have enough capacity to care for sick people. Hospitals are at full capacity now, and they want to stay that way, so they can't handle a surge. Moreover, the people who became ill in Southeast Asia were cared for in good hospitals. In Yolo County, a committee is examining alternate facilities, but much depends on funding. Businesses should be planning aggressively, families, too; there aren't any other options. A pandemic would be equivalent to a Category 5 hurricane in all 50 states for a 90-120 day period.

State Legislation on Avian Influenza
[Diane Colborn handout]

AB 847 (Wolk): Enacts the Avian Flu Wildlife Surveillance Act, requiring development and implementation of a plan for surveillance, monitoring, sampling, diagnostic testing, and reporting of AI in wild birds. Status: Passed Assembly 70-0. Pending in Senate Natural Resources and Water Committee.

SB 409 (Kehoe): Recognizes Dept. of Health Services as lead agency for responding to public health emergencies. Appropriates $7 million in additional funding to DHS for public health emergencies, including antiviral medications, lab equipment, state staff and personal protective equipment. Status: Passed Assembly Appropriations Committee 14-0. Pending on Assembly floor.

SB 1426 (Denham): Appropriates $14 million to Dept. of Food and Agriculture (CDFA) for emergency services and creates an Emerging Threat Intervention Account. States Legislative findings that threats to food-producing plants and animals include, among others, AI. Status: Set for hearing in Senate Agriculture Committee April 18, 2006.

SB 1774 (Torlakson): Authorizes county health officers to enter into an MOU with another public agency for laboratory services relating to public health. Notes that the public health laboratory system is ill prepared to meet the increasing demands of today's public health concerns, including AI. Status: Introduced.

AB 460 (Parra)" Authorizes CDFA to enter into a cooperative agreement with USDA for prevention and control of AI. Makes Legislative findings that AI represents a significant threat to California's poultry industry and to public health. Status: Enacted in 2005.

Governor's proposed budget also includes funding for DHS and CDFA for AI. These proposals are in the process of being reviewed by legislative budget subcommittees. The Governor's budget did not propose funding to DFG for AI, but DFG has submitted a Budget Change Proposal finance letter requesting funding.